

Notice of Allowability

Application No.

10/762,852

Examiner

Craig E. Walter

Applicant(s)

FALK ET AL.

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the supplemental amendment received 5 May 2006.
2. ☒ The allowed claim(s) is/are 1, 4-29, and 32-56 (original); 1-52 (as renumbered by Examiner).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

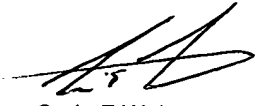
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Craig E Walter
Examiner, Art Unit 2188

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance:

As for claims 1 and 29, Gschwind et al. (US PG Publication 2003/0046492), hereinafter Gschwind teaches:

a processing means (i.e. central processing unit (CPU)) – (Fig. 1, element 120; paragraph 0027, lines 1-4);

a signal processing system (Fig. 1, element 100) coupled to the CPU, the signal processing system comprising (Fig. 1, element 100; paragraph 0027, lines 1-11), a plurality of subsystems (i.e. signal processing means), including an input sample subsystem and at least one other subsystem (Fig. 1, elements 120a and 120b describe a device controller and network interface respectively; paragraph 27, lines 6-11 – the network interface is an input sample subsystem and the device controller is the “other” subsystem);

a memory device configurable into a plurality of configurations (paragraph 0027, lines 6-16 – Fig. 1, element 130), dependent upon an operational mode of the signal processing system (paragraph 0053, , lines 1-15 – the access mode (i.e. operational mode of the configurable memory) is determined by the CPU which is part of the signal processing system), wherein the memory device is configurable into regions (Fig. 5, element 540b describes the step in which the configurable memory is partitioned based on different types of accesses) , wherein each region

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stores a type of data, and each region is accessed in one of a plurality of manners, and each region is accessed by particular subsystems (Fig. 6, element 690 describes the data being accessed differently based on the mode of the memory).

Gschwind however fails to teach the input sample subsystem as receiving satellite data and producing input data samples, wherein the at least one other subsystem comprises a signal processing subsystem that produces coherent data, and a fast fourier transform (FFT) subsystem that processes the coherent data and produces noncoherent data as claimed by Applicant.

Forrester (US PG Publication 2003/0134646 A1) teaches a system a method for transmitting global positioning system information from a wireless communication system base station, which includes a GPS transmitter and receiver used to store and receive information to automatically acquire GPS satellites when it receives a position request. Forrester however fails to teach the input sample subsystem as receiving satellite data and producing input data samples, wherein the at least one other subsystem comprises a signal processing subsystem that produces coherent data, and a fast fourier transform (FFT) subsystem that processes the coherent data and produces noncoherent data as claimed by Applicant.

As for claim 17 and 45, King et al. (US PG Publication 2003/0147457 A1), hereinafter King teaches a method (and medium as in claim 45) for multi-channel signal processing, comprising:

continuously receiving a plurality of discrete signals (paragraph 00128, lines 1-9 -the receiver continuously tracks and demodulates data transmitted from the satellite. Since the transmitted data is digital, it is in the form of a discrete signal);

processing the plurality of discrete signals in a signal processing component on a time-multiplexed basis (paragraph 0116, lines 1-10 – all satellite signals are processed by time multiplexing).

Gschwind further teaches configuring a signal processing component for one of a plurality of operational modes (paragraph 0053, lines 1-15 – the access mode (i.e. operational mode of the configurable memory) is determined by the CPU which is part of the signal processing system, including allocating a memory into areas for storage of types of data (Fig. 5, element 540b describes that the memory can be distributed or allocated as either a cache, or as local memory containing instructions), wherein certain areas are accessed by certain signal processing subsystems in certain manners (Fig. 6, element 690 describes the data being accessed differently based on the mode of the memory).

Despite these teachings, neither King, nor Gschwind (either alone or in combination) teach configuring the signal processing component to operate in different modes concurrently for different discrete signals and continuously reconfiguring the signal processing component based on evaluation of output of the signal processing component, wherein reconfiguring includes configuring the signal processing component to operate in different modes concurrently for different discrete signals.

2. Claims 4-16, 18-28, 32-44 and 46-56 are allowable for further limiting claims 1, 17, 29 and 46 respectively.
3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig E. Walter whose telephone number is (571) 272-8154. The examiner can normally be reached on 8:30a - 5:00p M-F.
5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on (571) 272-4210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Craig E Walter
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Art Unit 2188

CEW



MANO PADMANABHAN
SUPERVISORY PATENT EXAMINER